

REMARKS

This Amendment is submitted in response to the outstanding Office Action wherein the Examiner rejected claims 18 and 24 under 35 U.S.C. §103 (a) as being unpatentable over Meeker (U.S. Patent 5,665,185) in view of Mavlyanova, et al. (abstract of SU 1754468) and Weigand (U.S. Patent 4,088,805). Reconsideration of the application in view of the amendments submitted herewith and the following remarks is respectfully requested.

It is the Examiner's position that Meeker teaches an apparatus comprising a nonwoven scrim supply, a thermoplastic barrier film supply, roller for drawing the scrim and film together as a composite therethrough, a glass fiber chopper for depositing glass filter on the barrier film, an oven for heating the composite under pressure and a conventional cooling means for cooling the composite under pressure to adhere the glass fiber to the barrier film. The Examiner acknowledges that Meeker is silent as to a thermoplastic adhesive dispenser for dispensing adhesive on the barrier film. However, the Examiner acknowledges that Meeker does not exclude depositing a powdered adhesive along with the chopped glass and that it would be obvious to one of ordinary skill to include in the apparatus taught by Meeker a thermoplastic dispenser. The Examiner then turns to Mavlyanova for teaching the use of a powdered adhesive in a chopped fiberglass layer.

The Examiner also notes that Meeker uses a conventional cooling means, such as air cooling. He concludes that it would be obvious to one of ordinary skill to use any well known and conventional cooling means as the cooling means in Meeker such as the cooling nip roller or air cooling disclosed in Wiegand.

This rejection is respectfully traversed and should be withdrawn for the following reasons.

Prior to discussing the specific art, applicants note that they have amended claim 18 in order to define their apparatus with greater particularity. As noted at page 11, line 3 of the specification, the resin and fiberglass/barrier film/nonwoven composite is fed through an oven where the heating elements are located on the upperside of the oven so that only the fiberglass side of the composite is heated to activate the powdered adhesive and bond the nonwoven scrim and barrier film. There is no direct heat applied from the bottom of the

nonwoven scrim side of the composite. This teaching seeks to avoid forcing the glass into the barrier film with the risk that it will puncture the film. This has been incorporated into claim 18, which applicants submit patentably distinguishes claim 18 over any rejection based on Meeker as a primary reference.

Applicants provide a different apparatus than what is disclosed by Meeker. The principal reason for this is that applicants prepare a different type of laminate than Meeker prepares.

The Examiner correctly notes that Meeker is silent as to a thermoplastic adhesive dispenser for dispensing adhesive on the barrier film. As noted, the laminate product created by Meeker's apparatus is different than the laminate formed by applicants' apparatus. In applicants' apparatus, the heating elements are only on the upperside of the oven to heat the fiberglass side of the composite -- and not the nonwoven scrim side of the resin and fiberglass/barrier film/nonwoven composite. See Specification at page 11, lines 6-9. The purpose of having the heating elements on the upperside of the oven is to create a composite where the thermoplastic adhesive melts and adheres the chopped fiberglass to the barrier film and bonds the barrier film to the scrim. This heats only the surface of the barrier film so that the fiberglass does not penetrate the barrier film. See Specification at page 11, lines 13-14 and page 12, lines 1-4. This feature of the apparatus is not disclosed or suggested in any way by Meeker. In contrast to this, Meeker uses an oven with heating elements 32 and 34 positioned above and below the belts of the press to heat both upper and lower sides of its composite (see col. 2, lines 42-46 and Fig. 3). This causes the glass to become encapsulated within the barrier film (see col. 1, lines 59-60) -- yielding a different product than prepared by applicants claimed apparatus.

Applicants further submit that the combination of Meeker with Mavlyanova, et al. is not proper as it is not supported or suggested by any teaching in either reference. Simply stated, there is no reason to use the powdered adhesive of Mavlyanova, et al. in a chopped fiberglass layer in Meeker. This is because the Meeker teaching is complete in and of itself. Meeker teaches applying heat and pressure so that the fiberglass adheres to the composite by becoming encapsulated in the barrier film -- a product that is not the composite of applicants' apparatus. See col. 3, lines 57-63. Applicants' apparatus was created to form a resin and

fiberglass/barrier film/nonwoven composite with the use of a thermoplastic adhesive dispenser, with control of heat and pressure so that the adhesive melts to adhere the glass to the barrier film without penetrating the barrier film. Accordingly, one skilled in the art would not look to Mavlyanova, et al. for the teaching of applying a powered adhesive to a composite being processed in Meeker.

Even up on combination with Wiegand, directed to an apparatus for forming composite laminate by heating and cooling under pressure by alternative cooling methods, *i.e.*, cooling nip rollers, it is respectfully submitted that there is no showing or suggestion of the applicants' apparatus utilizing a thermoplastic resin dispenser and heating only on the upperside of the oven. Since neither Meeker, Mavlyanova, et al., nor Wiegand, alone or in combination, disclose, teach or suggest there features of applicants' claimed apparatus, rejection under 35 U.S.C. § 103(a) is improper. Thus, applicants request withdrawal of this rejection.

In view of this Amendment, applicants respectfully submit that the application is now in condition for immediate allowance. Accordingly, the Examiner is respectfully requested to reconsider the application at an early date with a view towards issuing an immediate Notice of Allowance. If upon review of the application, the Examiner is unable to issue an immediate Notice of Allowance, the Examiner is respectfully requested to telephone the undersigned attorney with a view towards resolving any outstanding issues.

Early and favorable action is earnestly solicited.

Respectfully submitted,

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